

DOD CORPORATE INFORMATION MANAGEMENT

CONCEPT PAPER

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Mission

The mission of DoD Information Management is to provide for the management of DoD business information so that it supports efficient and effective business operations and is responsive to DoD policy directions.

To satisfy this mission, a DoD Information Management program is needed to define, establish, and coordinate the management structure and processes that provide the essential foundation to:

- Provide information management policies and oversee their execution.
- Provide a consistent DoD information management and planning system which fosters uniform business information systems.
- Facilitate the definition, development and implementation of business methods that are responsive to DoD policy; and develop information systems that fully support these business methods.
- Support directly the DoD mission and DoD constituencies (e.g., military planners and operators, resource managers, acquisition managers, and DoD staff executives).

Scope

The scope of DoD Information Management must be considered from at least two perspectives and these are:

- Vertically, information management begins with corporate policy and carries all the way down to day to day operations in each business area. In between are the essential areas of business methods, practices and procedures, information systems and day to day business procedures.
- Horizontally, information management includes the functional business activities of the Department.
- The following functions are included in the initial scope of the Information Management Program:
 - Warehousing
 - Inventory Management
 - Civilian Personnel
 - Civilian Payroll
 - Financial Management¹
 - Contract Payment

1 Financial Management: A single integrated system that supports management and program/budget requirements

- Note: Embedded computers in weapon systems are not considered part of this information management program.

Guiding Principles

The following are the guiding principles for DoD Information Management.

- Corporate systems must support corporate policies.
- Corporate systems must be a combination of functional activities, personnel, procedures, other resources, and supporting information systems.
- Information systems development must be driven by well-defined functional requirements.
- Corporate system development must be led by functional experts at the corporate level.
- User involvement is required from beginning to end.
- Corporate level must define standard data across similar systems.
- Corporate level must develop and institute a "corporate information model."
- Corporate level must include central oversight of systems acquisition.

Vision of the Future

This section presents a vision of the future for DOD business operations and activities for the 1990's and beyond. This vision articulates a view of the impacts of effective information management. It is assumed no fundamental changes in military mission or posture. The emphasis on flexibility to respond will continue and will require flexibility in supporting information systems. The vision represents a combination of perspectives from the future environment, DOD business operations, DOD information management and the supporting information systems.

FUTURE ENVIRONMENT

- Both Congress and the public will expect integrity, efficiency, and effectiveness in DOD activities and personnel. Establishment of accountability for proper use of the public resources allocated to DOD will continue to be the norm.
- Real growth in DOD resources is not anticipated and significant pressure will exist to perform more work with fewer resources. Increased emphasis on productivity, efficiency and effectiveness will be seen as the opportunity to achieve improvements.

- Without clear legislative reform, specific statutory demands and constraints on the Department's activities in all its business areas will continue and most likely be even more complex in their impacts than those of today. The ability to monitor, validate and report compliance in a very efficient manner will be mandatory.

DOD BUSINESS OPERATIONS

- Improved and intensified strategic planning has helped to focus the directions of DOD business policies and methods, setting a clear path for strengthening and change.
- Through the commitment of the Department's top leadership, business operations in functional areas such as payroll, personnel, material management have become simplified wherever possible and have become fundamentally consistent throughout all the components.
- Common criteria to evaluate the quantitative and qualitative performance of activities in the different business areas have been developed and employed. The evaluation process is providing more focused and effective improvements in business practices as well as critical input to the strategic planning activities.
- Through an infrastructure of information management and supporting processes, potential corporate policy changes are now being evaluated for impact quickly and implementation time to respond to new policy directions has been shortened considerably.
- Corporate level management of business policies and practices in each major functional area has been strengthened considerably by the introduction of tools, techniques and procedures that permit analysis and evaluation of business methods. These new tools and techniques and methodologies were introduced and developed through the overall information management program.

DOD INFORMATION MANAGEMENT

- Strategic information management planning has matured and has provided an effective translation of DOD policies into business and information system strategies and programs.
- Information management practices have matured to the point where clear prominence of business policy and user requirements in systems projects has been achieved and is providing more effective focus for development of new systems or systems improvements.
- Data and information are easily exchanged among functional users and across functional business area boundaries because superfluous differences have been removed.

- Significant improvements in information management have been achieved through the development of information models and the reconciliation of diverse terminologies and definitions. This has permitted business and technical systems analysis activities to focus on the substance of business activities and processes, uncluttered by semantic differences.

DOD BUSINESS INFORMATION SYSTEMS

- A consolidation has occurred that has resulted in a single common standard information system or combination of systems for each major functional area of business activity.
- Significant cost savings and improvements in systems effectiveness have been achieved through the consolidation of systems.
- The fact that information management has provided a clear mapping of policy directions and requirements to guide the technical activities has made the system development process more focused and effective.
- The stability and direction provided by the improved strategic planning and strategic information management planning has made it possible to plan technology strategies more effectively. This in turn is leading to employment of new technology more rapidly and more economically.
- The abilities and skills of the technical community have been strengthened by intensified training, new and more effective job series which reflect the needs of information management and information technology management. Finally, job satisfaction has improved since the personnel can now see how their work contributes to DOD policy implementation.

Situation Analysis

The present situation in DOD can be addressed from many, many perspectives. For the sake of simplicity, only selected descriptions, relevant to information management are included.

PRESENT ENVIRONMENT

- Congress, the public at large, and the Executive Branch recognize the need to reduce and eliminate waste, fraud and abuse.
- Procurement scandals as well as outrageous prices for certain weapons systems parts have been recognized symptomatic of basic problems in certain DOD business practices. Systemic reforms, such as the Defense Management Review, have been initiated.
- Congress is not accepting excuses for non-compliance with fundamental policies and is using the budget process to discipline compliance or remove funding.
- Resource reductions in overall DOD budget levels have begun and budgets are not expected to shift to positive real growth for the foreseeable future.

DOD BUSINESS OPERATIONS

- Strategic planning exists in many forms in the DOD, but focused and penetrating strategic plans in each of the DOD business areas are not usually available and are not fully utilized to provide specific direction for business area improvements and resources allocation.
- Strategic direction of individual business areas is extremely difficult because business methods, practices and procedures are not organized into a coherent policy view of the business area.
- Simplified and integrated descriptions of business area policies, methods, practices and procedures exist only in isolated cases. The absence of these descriptions and the related management process to use them makes it nearly impossible to provide integrated DoD policy direction to functional business areas.
- The ability to build a coherent picture of business methods, practice and procedure is seriously hampered by an amalgamation of law and regulation. This problem is compounded by a variety of component unique practices, terminology and supporting information systems.
- The inconsistency of business methods between components, together with varied terminology and data make the establishment and use of overall quantitative and qualitative performance measures extremely difficult, if not impossible. This, in turn, makes it difficult to establish accountability for performance.

DOD INFORMATION MANAGEMENT

- The management structure and processes are not in place to perform information management within the DOD. Isolated levels of information management are performed in individual operating units in the components.
- The most critical missing linkages in performing information management are OSD strategic planning in DoD-wide business areas, policy development and direction, business methods codification, and management processes to implement these activities on a sustaining basis.

DOD INFORMATION SYSTEMS

- Without an information management perspective and the associated management structure and processes, significant numbers of redundant or duplicative information systems have been developed and are currently in operation.

- Absent the direction from strategic planning and business methods analyses, today's business oriented information systems have been built based on a bottom-up view of requirements.
- Sharing data among systems or exchanging data between today's business information systems is usually cumbersome and expensive, if it can be accomplished at all.
- Since the policy planning direction is not available, systems planning is often risky and does not lead to well planned utilization of new, economical technologies.

Objectives

Establish a fundamental redirection within DOD toward a broader and more effective information management commitment. DoD must have better integration of management information used by the Military Departments, the Joint Staff, the Defense Agencies and the Office of the Secretary of Defense. A common frame of reference for information and functional requirements must be developed for use across all functional areas of the Department.

- Provide the information management structures and processes to ensure business systems and their supporting information systems are responsive to corporate direction.
- Provide substantial improvements in the efficiency and effectiveness of the functional business areas through the application of information management.
- Achieve substantial funding and personnel resource savings through elimination of duplicative systems in the functional business areas.

Goals

In order to achieve the vision of the future contained in this plan, eight key goals must be attained:

- Senior DoD officials fully support and champion the DoD information management concept and course of action with OSD and Service principals. This commitment is expressed in an understanding of the complexity of defining and implementing each interdependent element of information management
- Implementation of all of the necessary pieces of information management structure and process must be achieved.
 - Strategic planning activities must provide appropriate direction to business areas
 - Standardized approaches to defining business methods and policies should be implemented and applied to all major functional business areas.

- In each business area, common definitions of terms and data must be developed so that policy direction can be clearly understood, data can be readily shared, and data be consolidated for policy review.
- Systems development efforts should only be undertaken when they are responsive to policy direction and user articulated requirements
- Common integrated information systems, built upon standardized information, that address all major business functions.

Strategies

- Promote understanding of the guiding principles, vision and goals for the management of information.
- Prepare and execute Information Management Plans, one for each operating or staff group and one for each major business area, that provide context, direction and priority for the development of information systems DoD-wide. These two sets of plans must be consistent with each other and with the overall DoD Information Management Plan.
- Develop and implement data models for each functional area. Develop and implement a data dictionary that defines, describes, and relate all data in use by DoD, in a common, standard manner. These would initially apply to each new system and later retrofitted to existing systems.
- Provide methods for developing and operating information systems patterned after and building upon DoD's Life-Cycle Management process.
- Conduct continuing value analyses of the effectiveness of the DoD information systems portfolio such as the efficiency of DoD internal software services and software service organizations.
- Evolve a mutually supportive relationship between DoD functional management, as an informed customer, that accepts responsibility for development of its information systems, and information technology support organizations.
- Provide closer ties among emerging information technologies, information processing standards, and technology support service organizations.